

# MICROBIOLOGY AND MOLECULAR BIOLOGY REVIEWS

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1. **Arendsen, A. F., M. Q. Solimar, and S. W. Ragsdale.** 1999. Nitrate-dependent regulation of acetate biosynthesis and nitrate respiration by *Clostridium thermoaceticum*. *J. Bacteriol.* **181**:1489–1495.
2. **Cox, C. S., B. R. Brown, and J. C. Smith.** *J. Gen. Genet.*, in press.\* {Article title is optional; journal title is mandatory.}
3. **da Costa, M. S., M. F. Nobre, and F. A. Rainey.** 2001. Genus I. *Thermus* Brock and Freeze 1969, 295,<sup>AL</sup> emend. Nobre, Trüper and da Costa 1996b, 605, p. 404–414. In D. R. Boone, R. W. Castenholz, and G. M. Garrity (ed.), *Bergey's manual of systematic bacteriology*, 2nd ed., vol. 1. Springer, New York, N.Y.
4. **Elder, B. L., and S. E. Sharp.** 2003. Cumitech 39, Competency assessment in the clinical laboratory. Coordinating ed., S. E. Sharp. ASM Press, Washington, D.C.
5. **Fitzgerald, G., and D. Shaw.** In A. E. Waters (ed.), *Clinical microbiology*, in press. EFH Publishing Co., Boston, Mass.\* {Chapter title is optional.}
6. **Forman, M. S., and A. Valsamakis.** 2003. Specimen collection, transport, and processing: virology, p. 1227–1241. In P. R. Murray, E. J. Baron, M. A. Pfaller, J. H. Tenover, and R. H. Tenover (ed.), *Manual of clinical microbiology*, 8th ed. ASM Press, Washington, D.C.
7. **Green, P. N., D. Hood, and C. S. Dow.** 1984. Taxonomic status of some methylotrophic bacteria, p. 251–254. In R. L. Crawford and R. S. Hanson (ed.), *Microbial growth on C<sub>1</sub> compounds*. Proceedings of the 4th International Symposium. American Society for Microbiology, Washington, D.C.
8. **Odell, J. C.** April 1970. Process for batch culturing. U.S. patent 484,363,770. {Include the name of the patented item/process if possible.}

9. **O'Malley, D. R.** 1998. Ph.D. thesis. University of California, Los Angeles. {*Title is optional.*}

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1. **Charlier, D., and N. Glansdorff.** September 2004, posting date. Biosynthesis of arginine and polyamines. In R. Curtiss III et al. (ed.), *EcoSal—Escherichia coli and Salmonella: cellular and molecular biology*, chapter 3.6.1.10. [Online.] <http://www.ecosal.org>. ASM Press, Washington, D.C. {*For online-only books or continually updated Web resources [for the latter, posting or accession date is required, but publisher's name and location are optional].*}
2. **Dimick, J. B., H. G. Welch, and J. D. Birkmeyer.** 18 August 2004, posting {or revision} date. Surgical mortality as an indicator of hospital quality. *JAMA* **292**. [Online.] <http://jama.ama-assn.org/cgi/content/short/292/7/847>. {*For online journals; page numbers may not be available.*}
3. **Sullivan, C. J. (ed.).** 1999–2001. Fungi: an evolving electronic resource for the microbiological community. ASM Press. [Online.] <http://link.asmusa.de/link/service/books/91090>. Accessed 7 September 2001. {*For online-only books.*}
4. **Zellnitz, F., and P. M. Foley.** 2 October 1998, posting {or revision} date. History of virology. *Am. Virol. J.* **1**:30–50. [Online.] <http://www.avj.html>. {*For online-only journals; page numbers may not be available.*}
5. **Zheng, Z., and J. Zou.** 5 September 2001. The initial step of the glycerolipid pathway: identification of glycerol-3-phosphate/dihydroxyacetone phosphate dual substrate acyltransferases in *Saccharomyces cerevisiae*. *J. Biol. Chem.* doi:10.1074/jbc.M104749200. {*For papers published online in manuscript form.*}

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... system was used (J. L. McInerney, A. F. Holden, and P. N. Brighton, submitted for publication).

... in mitochondria (S. De Wit, C. Thioux, and N. Clumeck, Abstr. 34th Intersci. Conf. Antimicrob. Agents Chemother., abstr. 114, 1994).

... for other bacteria (A. X. Jones, personal communication).

... discussed previously (L. B. Jensen, A. M. Hammerum, R. L. Poulsen, and H. Westh, Letter, *Antimicrob. Agents Chemother.* **43**:724–725, 1999).

... discussed previously (S. L. W. On and P. A. R. Vandamme, Authors' Reply to Letter, *J. Clin. Microbiol.* **39**:2751–2752, 2001).

... the manufacturer (Sigma manual, Sigma Chemical Co., St. Louis, Mo.).

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... information found at the XYZ website ([http://cbx\\_iou.pgr](http://cbx_iou.pgr)).

... the ABC program (version 2.2; Department of Microbiology, State University [<http://www.stu.micro>]).

**URLs for companies that produce any of the products mentioned in your study or for products being sold may NOT be included in the article. However, company URLs that permit access to scientific data related to the study or to shareware used in the study are permitted.**

If any reference(s) must be moved from the References section to the text to conform to ASM style, the numbered reference (byline, title, etc.) will be replaced with the words "Reference deleted" in order to preserve the author's original numbering sequence and to avoid excessive renumbering.

#### Abbreviations

**General.** Abbreviations should be used as an aid to the reader, rather than as a convenience to the author, and therefore their **use should be limited**. Abbreviations other than those recommended by the International Union of Pure and Applied Chemistry-International Union of Biochemistry (IUPAC-IUB) (*Biochemical Nomenclature and Related Documents*, 1978) should be used only when a case can be made for necessity, such as in tables and figures. It is often possible to use pronouns or to paraphrase a long word after its first use (e.g., "the drug" or "the substrate"). Standard chemical symbols and trivial names or their symbols (folate, Ala, Leu, etc.) may also be used. Define each abbreviation and introduce it in parentheses the first time it is used; e.g., "cultures were grown in Eagle minimal essential medium (MEM)." Generally, eliminate abbreviations that are not used at least three times in the text (including tables and figure legends).

**Not requiring introduction.** In addition to abbreviations for Système International d'Unités (SI) units of measurement, other common units (e.g., bp, kb, and

Da), and chemical symbols for the elements, the following should be used without definition in the title, summary, text, figure legends, and tables: DNA (deoxyribonucleic acid); cDNA (complementary DNA); RNA (ribonucleic acid); cRNA (complementary RNA); RNase (ribonuclease); DNase (deoxyribonuclease); rRNA (ribosomal RNA); mRNA (messenger RNA); tRNA (transfer RNA); AMP, ADP, ATP, dAMP, ddATP, GTP, etc. (for the respective 5' phosphates of adenosine and other nucleosides) (add 2', 3', or 5'-when needed for contrast); ATPase, dGTPase, etc. (adenosine triphosphatase, deoxyguanosine triphosphatase, etc.); NAD (nicotinamide adenine dinucleotide); NAD<sup>+</sup> (nicotinamide adenine dinucleotide, oxidized); NADH (nicotinamide adenine dinucleotide, reduced); NADP (nicotinamide adenine dinucleotide phosphate); NADPH (nicotinamide adenine dinucleotide phosphate, reduced); NADP<sup>+</sup> (nicotinamide adenine dinucleotide phosphate, oxidized); poly(A), poly(dT), etc. (polyadenylic acid, polydeoxythymidylic acid, etc.); oligo(dT), etc. (oligodeoxythymidylic acid, etc.); UV (ultraviolet); PFU (plaque-forming units); CFU (colony-forming units); MIC (minimal inhibitory concentration); Tris [tris(hydroxymethyl)aminomethane]; DEAE (diethylaminoethyl); EDTA (ethylenediaminetetraacetic acid); EGTA [ethylene glycol-bis(β-aminoethyl ether)-N,N,N',N'-tetraacetic acid]; HEPES (N-2-hydroxyethylpiperazine-N'-2-ethanesulfonic acid); PCR (polymerase chain reaction); and AIDS (acquired immunodeficiency syndrome). Abbreviations for cell lines (e.g., HeLa) also need not be defined.

The following abbreviations should be used without definition in tables:

amt (amount)	SE (standard error)
approx (approximately)	SEM (standard error of the mean)
avg (average)	
concn (concentration)	sp act (specific activity)
diam (diameter)	sp gr (specific gravity)
exptl (experimental)	temp (temperature)
expt (experiment)	tr (trace)
ht (height)	vol (volume)
mo (month)	vs (versus)
mol wt (molecular weight)	wk (week)
no. (number)	wt (weight)
prepn (preparation)	yr (year)
SD (standard deviation)	

## Reporting Numerical Data

Standard metric units are used for reporting length, weight, and volume. For these units and for molarity, use the prefixes m, μ, n, and p for 10<sup>-3</sup>, 10<sup>-6</sup>, 10<sup>-9</sup>, and 10<sup>-12</sup>, respectively. Likewise, use the prefix k for 10<sup>3</sup>. Avoid compound prefixes such as mμ or μμ. Use μg/ml or μg/g in place of the ambiguous ppm. Units of temperature are presented as follows: 37°C or 324 K.

When fractions are used to express units such as enzymatic activities, it is preferable to use whole units, such as "g" or "min," in the denominator instead of fractional or multiple units, such as μg or 10 min. For example,

"pmol/min" is preferable to "nmol/10 min," and "μmol/g" is preferable to "nmol/μg." It is also preferable that an unambiguous form such as exponential notation be used; for example, "μmol g<sup>-1</sup> min<sup>-1</sup>" is preferable to "μmol/g/min." Always report numerical data in the applicable SI units.

For a review of some common errors associated with statistical analyses and reports, plus guidelines on how to avoid them, see the article by Olsen (Infect. Immun. **71**:6689–6692, 2003).

For a review of basic statistical considerations for virology experiments, see the article by Richardson and Overbaugh (J. Virol. **79**:669–676, 2005).

## Nomenclature

The spelling of bacterial names should follow the *Approved Lists of Bacterial Names (Amended) & Index of the Bacterial and Yeast Nomenclatural Changes* (V. B. D. Skerman et al., ed., ASM Press, Washington, D.C., 1989) and the validation lists and notification lists published in the *International Journal of Systematic and Evolutionary Microbiology* (formerly the *International Journal of Systematic Bacteriology*) since January 1989. In addition, two sites on the World Wide Web list current approved bacterial names: Bacterial Nomenclature Up-to-Date ([http://www.dsmz.de/microorganisms/main.php?contentleft\\_id=14](http://www.dsmz.de/microorganisms/main.php?contentleft_id=14)) and List of Prokaryotic Names with Standing in Nomenclature (<http://www.bacterio.cict.fr>). If there is reason to use a name that does not have standing in nomenclature, the name should be enclosed in quotation marks in the title and at its first use in the abstract and the text and an appropriate statement concerning the nomenclatural status of the name should be made in the text. "*Candidatus*" species should always be set in quotation marks.

Names used for viruses should be those approved by the International Committee on Taxonomy of Viruses (ICTV) and published in *Virus Taxonomy: Classification and Nomenclature of Viruses, Seventh Report of the International Committee on Taxonomy of Viruses* (M. H. V. van Regenmortel et al., ed., Academic Press, San Diego, Calif., 2000). In addition, the recommendations of the ICTV regarding the use of species names should generally be followed: when the entire species is discussed as a taxonomic entity, the species name, like other taxa, is italic and has the first letter and any proper nouns capitalized (e.g., *Tobacco mosaic virus*, *Murray Valley encephalitis virus*). When the behavior or manipulation of individual viruses is discussed, the vernacular (e.g., tobacco mosaic virus, Murray Valley encephalitis virus) should be used. If desired, synonyms may be added parenthetically when the name is first mentioned. Approved generic (or group) and family names may also be used.

For enzymes, use the recommended (trivial) name assigned by the Nomenclature Committee of the IUB as described in *Enzyme Nomenclature* (Academic Press, Inc., New York, N.Y., 1992) and at <http://www.chem.qmul.ac.uk/iubmb/enzyme/>.

For nomenclature of restriction enzymes, DNA methyltransferases, homing endonucleases, and their genes, refer to the article by Roberts et al. (Nucleic Acids Res. **31**:1805–1812, 2003).

Genetic nomenclature should essentially follow the recommendations of Demerec et al. (Genetics **54**:61–76, 1966) and those given in the instructions to authors of the *Journal of Bacteriology* and *Molecular and Cellular Biology* (January issues) and *Eukaryotic Cell* (February issue). To facilitate accurate communication, **it is important that standard genetic nomenclature be used whenever possible and that deviations or proposals for new naming systems be endorsed by an appropriate authoritative body.** Review and/or publication of submitted manuscripts that contain new or nonstandard nomenclature may be delayed by the editor or the Journals Department so that they may be reviewed by the Genetics and Genomics Committee of the ASM Publications Board.

Before submission of manuscripts, authors may direct questions on genetic nomenclature to the committee's chairman: Maria Costanzo (e-mail: maria@genome.stanford.edu). Such a consultation should be mentioned in the manuscript submission letter.

## ILLUSTRATIONS AND TABLES

**Digital files that are acceptable for production (see below) must be provided for all illustrations on return of the modified manuscript. (On initial submission, the entire paper may be submitted in PDF format.)**

**We strongly recommend that before returning their modified manuscripts, authors check the acceptability of their digital images for production by running their files through Rapid Inspector,** a tool provided at the following URL: <http://rapidinspector.cadmus.com/mw/>. Rapid Inspector is an easy-to-use Web-based application that identifies file characteristics that may render the image unusable for production.

Illustrations may be continuous-tone images, line drawings, or composites. Suggestions about how to ensure accurate color reproduction are given below.

The preferred format for tables is MS Word; however, WordPerfect and Acrobat PDF are also acceptable (see the section on Tables below).

Since the contents of computer-generated images can be manipulated for better clarity, the Publications Board at its May 1992 meeting mandated that a description of the software/hardware used should be put in the figure legend(s).

### Illustrations

**File types and formats.** As mentioned above, **illustrations may be supplied as PDF files for reviewing purposes only on initial submission; in fact, we recommend this option to minimize file upload time. At the modification stage, production quality digital files must be submitted: TIFF or EPS files from supported applica-**

Macintosh		
Application	File type	
	Black and white	Color (CMYK) <sup>a</sup>
Adobe Illustrator 6.0, 7.0, 8.0, 9.0, 10.0, 11.0 CS	EPS	EPS
Adobe InDesign 1.0	EPS	EPS
Adobe PageMaker 6.5	EPS	EPS
Adobe Photoshop 4.0, 5.0, 5.5, 6.0, 7.0, 8.0 CS	TIFF	TIFF
Adobe Photoshop 5.0 LE	TIFF	N/A <sup>b</sup>
ChemDraw Pro 5.0	EPS/TIFF	EPS/TIFF
Corel Photo-Paint 8.0	TIFF	EPS
CorelDRAW 6.0, 8.0	EPS/TIFF	EPS
Deneba Canvas 6.0, 7.0, 8.0	EPS/TIFF	EPS
Macromedia FreeHand 7.0, 8.0, 9.0	EPS	EPS
PowerPoint 98, 2001	PPT <sup>c</sup>	N/A <sup>b</sup>
Prism 3 by GraphPad	TIFF	N/A <sup>b</sup>
Synergy Kaleidagraph 3.08, 3.51	EPS	N/A <sup>b</sup>

<sup>a</sup> Color graphics must be saved and printed in the CMYK mode, *not* RGB.  
<sup>b</sup> ASM accepts only black-and-white, not color, graphics created with Kaleidagraph, Adobe Photoshop 5.0 LE, Prism 3 by GraphPad, and PowerPoint.  
<sup>c</sup> For instructions on saving PowerPoint files, refer to the Cadmus digital art website at <http://cjs.cadmus.com/da/index.asp>.

Windows		
Application	File type	
	Black and white	Color (CMYK) <sup>a</sup>
Adobe Illustrator 7.0, 8.0, 9.0, 10.0, 11.0 CS	EPS	EPS
Adobe InDesign 1.0	EPS	EPS
Adobe PageMaker 6.5	EPS	EPS
Adobe Photoshop 4.0, 5.0, 5.5, 6.0, 7.0, 8.0 CS	TIFF	TIFF
Adobe Photoshop 5.0 LE	TIFF	N/A <sup>b</sup>
ChemDraw Pro 5.0	EPS/TIFF	EPS/TIFF
Corel Photo-Paint 8.0, 9.0	TIFF	EPS
CorelDRAW 7.0, 8.0, 9.0	EPS/TIFF	EPS
Deneba Canvas 6.0, 7.0	EPS/TIFF	EPS
Macromedia FreeHand 7.0, 8.0, 9.0	EPS	EPS
PowerPoint 97, 2000, XP	PPT <sup>c</sup>	N/A <sup>b</sup>
Prism 3 by GraphPad	TIFF	N/A <sup>b</sup>
SigmaPlot 8.01	EPS	EPS

<sup>a</sup> Color graphics must be saved and printed in the CMYK mode, *not* RGB.  
<sup>b</sup> ASM accepts only black-and-white, not color, graphics created with Adobe Photoshop 5.0 LE, Prism 3 by GraphPad, and PowerPoint.  
<sup>c</sup> For instructions on saving PowerPoint files, refer to the Cadmus digital art website at <http://cjs.cadmus.com/da/index.asp>.

tions or PowerPoint files (black and white only). Except for figures produced in PowerPoint, all graphics submitted with modified manuscripts must be bitmap, grayscale, or CMYK (*not* RGB). Acceptable file types and formats for production are given in the charts below. More-detailed instructions for preparing illustrations are available on the World Wide Web at <http://cjs.cadmus.com/da>. Please review this information before preparing your files. If you require additional information, please send an e-mail inquiry to [digitalart@cadmus.com](mailto:digitalart@cadmus.com).

**Minimum resolution.** It is extremely important that a high enough resolution is used. Any imported images must be at the correct resolution before they are placed.

Note, however, that the higher the resolution, the larger the file and the longer the upload time. Publication quality will *not* be improved by using a resolution higher than the minimum. Minimum resolutions are as follows:

300 dpi for grayscale and color  
600 dpi for lettering  
1,200 dpi for line art  
600 dpi for combination art (lettering and images)

**Size.** All graphics **MUST be submitted at their intended publication size**; that is, the image uploaded should be 100% of its print dimensions so that no reduction or enlargement is necessary. Resolution must be at the required level at the submitted size. Include only the significant portion of an illustration. White space must be cropped from the image, and excess space between panel labels and the image must be eliminated.

Maximum width for a 1-column figure:  $3\frac{5}{16}$  inches (ca. 8.4 cm)  
Maximum width for a 2-column figure:  $6\frac{7}{8}$  inches (ca. 17.4 cm)  
Minimum width for a 2-column figure:  $4\frac{1}{4}$  inches (10.8 cm)  
Maximum height:  $9\frac{1}{16}$  inches (23.0 cm)

**Contrast.** Illustrations must contain sufficient contrast to withstand the inevitable loss of contrast and detail inherent in the printing process. See also the section on color illustrations below.

**Labeling and assembly.** All final lettering, labeling, tooling, etc., **MUST** be incorporated into the figures. It cannot be added at a later date. If a figure number is included, it **must** appear well outside the boundaries of the image itself. (Numbering may need to be changed at the copyediting stage.) Each figure must be uploaded as a separate file, and any multipanel figures must be assembled into one file; i.e., rather than sending a separate file for each panel in a figure, assemble all panels in one piece and supply them as one file.

**Fonts.** To avoid font problems, set all type in one of the following fonts: Helvetica, Times Roman, European PI, Mathematical PI, or Symbol. All fonts other than these five must be converted to paths (or outlines) in the application with which they were created. For font use in PowerPoint images, refer to the Cadmus digital art website, <http://cjs.cadmus.com/da>.

**Compression.** Images created with Macintosh applications may be compressed with Stuffit. Images created with Windows applications may be compressed with WINZIP or PKZIP.

**Color illustrations.** Because the process of placing ink on paper by using printing presses is different from that used to produce a photo print or a laser print and the color

rendition on images viewed on a monitor depends to some extent on monitor resolution, some differences in color and contrast between the image you submit and the image printed in the journal or published online will be evident. (Figures showing red or green fluorescence and those with a significant range of colors may be difficult or impossible to reproduce exactly.) Color illustrations must be saved as either TIFF or EPS files, according to the application used (see charts above). The mode of the TIFF or EPS file must be CMYK, *not* RGB. Graphics in the RGB color space are intended for display on a monitor only and will not separate correctly for printing.

Adherence to the following guidelines, in addition to the general ones above, will help to ensure color reproduction that is as accurate as possible. Include only the significant portions of illustrations so that the number of printed pages containing color figures is minimized. The individual panels of a single figure must be assembled in a single file, including any necessary labels. Optimal color reproduction will be obtained if the composites comprise panels containing similar colors of similar lightness or darkness. If necessary, make unlike panels into separate figures/files; the color rendition will be more accurate since the two panels will be “scanned” separately.

## Drawings

Submit graphs, charts, complicated chemical or mathematical formulas, diagrams, and other drawings as finished products not requiring additional artwork or typesetting. No part of the graph or drawing may be handwritten. *All* elements, including letters, numbers, and symbols, *must* be easily readable, and both axes of a graph must be labeled. Keep in mind that the journal is published both in print and online and that the same electronic files submitted by the authors are used to produce both.

When creating line art, please use the following guidelines:

1. **All art MUST be submitted at its intended publication size.** For acceptable dimensions, see the Size section above.
2. **Avoid using screens (i.e., shading)** in line art. It can be difficult and time-consuming to reproduce these images without moiré patterns. Various pattern backgrounds are preferable to screens as long as the patterns are not imported from another application. If you must use images containing screens,
  - Generate the image at line screens of 85 lines per inch or lower.
  - When applying multiple shades of gray, differentiate the gray levels by at least 20%.
  - Never use levels of gray below 20% or above 70% as they will fade out or become totally black upon scanning and reduction.

3. Use thick, solid lines that are no finer than 1 point in thickness.
4. No type should be smaller than 6 points at the final publication size.
5. Avoid layering type directly over shaded or textured areas.
6. Avoid the use of reversed type (white lettering on a black background).
7. Avoid heavy letters, which tend to close up, and unusual symbols, which the printer may not be able to reproduce in the legend.
8. If colors are used, avoid using similar shades of the same color and avoid very light colors.

In figure ordinate and abscissa scales (as well as table column headings), **avoid the ambiguous use of numbers with exponents.** Usually, it is preferable to use the *Système International d'Unités* (SI) symbols ( $\mu$  for  $10^{-6}$ , m for  $10^{-3}$ , k for  $10^3$ , M for  $10^6$ , etc.). A complete listing of SI symbols can be found in the International Union of Pure and Applied Chemistry (IUPAC) "Manual of Symbols and Terminology for Physicochemical Quantities and Units" (Pure Appl. Chem. **21**:3–44, 1970). Thus, a representation of 20,000 cpm on a figure ordinate is to be made by the number 20 accompanied by the label kcpm.

When powers of 10 must be used, the journal requires that the exponent power be associated with the number shown. In representing 20,000 cells per ml, the numeral on the ordinate would be "2" and the label would be "10<sup>4</sup> cells per ml" (not "cells per ml  $\times 10^{-4}$ "). Likewise, an enzyme activity of 0.06 U/ml would be shown as 6 accompanied by the label 10<sup>-2</sup> U/ml. The preferred designation would be 60 mU/ml (milliunits per milliliter).

## Tables

Tables that contain artwork, chemical structures, or shading must be submitted as illustrations in an acceptable format at the modification stage. The preferred format for regular tables is MS Word; however, WordPerfect and Acrobat PDF are also acceptable. Note that a straight Excel file is *not* currently an acceptable format. Excel files must be either embedded in a Word or WordPerfect document or converted to PDF *before* being uploaded. **If your modified manuscript contains PDF tables, select "for reviewing purposes only" at the beginning of the file upload process.**

Tables should be formatted as follows. Arrange the data so that **columns of like material read down, not**

**across.** The headings should be sufficiently clear so that the meaning of the data is understandable without reference to the text. See the Abbreviations section (p. 7) of these Instructions for those that should be used in tables. Explanatory footnotes are acceptable, but more extensive table "legends" are not. Footnotes should not include detailed descriptions of the experiment. Tables must include enough information to warrant table format; those with fewer than six pieces of data will be incorporated into the text by the copy editor. Table 1 is an example of a well-constructed table.

TABLE 1. Partial restoration of NO production by exogenous TNF- $\alpha$  in cytochalasin B-inhibited macrophages treated with GBS and IFN

Treatment	Nitrite production (nmol/sample) <sup>a</sup> in macrophages treated with cytochalasin B at:		
	0 $\mu$ g/ml	5 $\mu$ g/ml	10 $\mu$ g/ml
Medium only	0.03 $\pm$ 0.006	0.10 $\pm$ 0.03	0.06 $\pm$ 0.03
GBS + IFN	2.14 $\pm$ 0.49	0.10 $\pm$ 0.05 <sup>b</sup>	0.08 $\pm$ 0.05 <sup>b</sup>
TNF- $\alpha$ + IFN	0.40 $\pm$ 0.13	0.42 $\pm$ 0.12	0.35 $\pm$ 0.02
TNF- $\alpha$ + GBS + IFN	1.70 $\pm$ 0.6	0.49 $\pm$ 0.18 <sup>b</sup>	0.42 $\pm$ 0.10 <sup>b</sup>

<sup>a</sup> Values are means  $\pm$  standard deviations (four samples per group) for NO secreted by macrophages treated with GBS COH 1 (50 CFU per cell) and IFN (10 U/ml) or TNF- $\alpha$  (1,000 U/ml).

<sup>b</sup> Significantly different ( $P < 0.05$ ) from the value for non-cytochalasin-treated control group as calculated by Student's *t* test.

## Presentation of Nucleic Acid Sequences

Nucleic acid sequences of limited length which are the primary subject of a study may be presented freestyle in the most effective format. Longer nucleic acid sequences must be presented as figures in the following format to conserve space. Print the sequence in lines of approximately 100 to 120 nucleotides in a nonproportional (monospace) font that is easily legible when published with a line length of 6 inches (ca. 15.2 cm). If possible, lines of nucleic acid sequence should be further subdivided into blocks of 10 or 20 nucleotides by spaces within the sequence or by marks above it. Uppercase and lowercase letters may be used to designate the exon-intron structure, transcribed regions, etc., if the lowercase letters remain legible at a 6-inch (ca. 15.2-cm) line length. Number the sequence line by line; place numerals, representing the first base of each line, to the left of the lines. **Minimize spacing between lines of sequence, leaving room only for annotation of the sequence.** Annotation may include boldface, underlining, brackets, boxes, etc. Encoded amino acid sequences may be presented, if necessary, immediately above or below the first nucleotide of each codon, by using the single-letter amino acid symbols. Comparisons of multiple nucleic acid sequences should conform as nearly as possible to the same format.